ABSTRACT

Methods and systems for managing data packets in various communication networks are provided. The system includes a first memory for storing at least a free data pointer and a buffer descriptor. The free data pointer points to a data buffer

5   allocated in a second memory. The buffer descriptor includes at least a data pointer pointing to a data buffer configured to store one or a portion of the communication packet. The first memory has a maximum threshold such that if the number of buffer descriptors stored in the first memory reaches the maximum threshold one or more buffer descriptors stored in the first memory are transferred to the second

10   memory.